

Amendments to the Claims

This listing of claims is provided as a courtesy.

Listing of Claims:

Claim 1 (previously presented): A method for controlling a clutch located between a drive motor and an automated manual transmission of a drive train, the method comprising:

controlling the clutch so as to change from an engine braking mode to a free wheeling mode; and

reengaging the clutch when a gas pedal is operated in the free-wheeling mode only when an engine rotational speed is above a transmission input rotational speed.

Claim 2 (previously presented): The method as recited in claim 1 wherein the clutch is disengaged to implement the free-wheeling mode.

Claim 3 (previously presented): The method as recited in claim 2 wherein the clutch is disengaged to implement the free-wheeling mode when a transmission gear is equal to or less than a maximum free-wheeling gear.

Claim 4 (previously presented): The method as recited in claim 2 wherein the clutch is disengaged to implement the free-wheeling mode when the gas pedal has not been operated.

Claim 5 (previously presented): The method as recited in claim 2 wherein the clutch is disengaged to implement the free-wheeling mode when an idling switch is activated.

Claim 6 (previously presented): The method as recited in claim 2 wherein the clutch is disengaged to implement the free-wheeling mode when a driver's desired torque is less than zero.

Claim 7 (previously presented): The method as recited in claim 2 wherein the clutch is disengaged to implement the free-wheeling mode when a driving speed is less than a maximum free-wheeling speed.

Claim 8 (previously presented): The method as recited in claim 2 wherein the clutch is disengaged to implement the free-wheeling mode when no downhill driving is detected.

Claim 9 (previously presented): The method as recited in claim 2 wherein the clutch is disengaged to implement the free-wheeling mode when the transmission is shifted to an automatic driving program.

Claim 10 (previously presented): The method as recited in claim 2 wherein the clutch is disengaged to implement the free-wheeling mode when a creep function is not activated.

Claim 11 (previously presented): The method as recited in claim 2 wherein the clutch is disengaged to implement the free-wheeling mode when there is no block of the free-wheeling function.

Claim 12 (previously presented): The method as recited in claim 1 wherein the change to the free-wheeling mode is blocked when a driving speed is greater than a maximum free-wheeling speed.

Claim 13 (previously presented): The method as recited in claim 1 wherein the change to the free-wheeling mode is blocked when no automatic driving program has been activated.

Claim 14 (previously presented): The method as recited in claim 1 wherein the change to the free-wheeling mode is blocked when a hill driving program has been activated.

Claim 15 (previously presented): The method as recited in claim 1 wherein a block of the change to the free-wheeling mode is deactivated when the gas pedal is operated or a driver's desired torque is greater than zero.

Claim 16 (previously presented): The method as recited in claim 1 wherein a block of the change to the free-wheeling mode is deactivated when there is a change from a manual driving program to an automatic driving program.

Claim 17 (previously presented): The method as recited in claim 1 wherein a block of the change to the free-wheeling mode is deactivated when there is a change in gear with a gear that is less than or equal to a maximum free-wheeling gear.

Claim 18 (previously presented): A drive train comprising:
a drive motor;
a manual transmission; and
a clutch connecting the drive motor and the manual transmission; and
a controller capable of automatically controlling the manual transmission, the controller capable of automatically changing an engine braking mode to a free-wheeling mode and reengaging the clutch when a gas pedal is operated in the free-wheeling mode only when an engine rotational speed is above a transmission input rotational speed.

Claim 19 (original): The drive train as recited in claim 18 wherein the drive train is a motor vehicle drive train.

Claim 20 (previously presented): A method for controlling a clutch located between a drive motor and an automated manual transmission of a drive train, the method comprising:
controlling the clutch so as to change from an engine braking mode to a free-wheeling mode, wherein the clutch is disengaged to implement the free-wheeling mode when a transmission gear is equal to or less than a maximum free-wheeling gear.

Claim 21 (previously presented): A method for controlling a clutch located between a drive motor and an automated manual transmission of a drive train, the method comprising:

controlling the clutch so as to change from an engine braking mode to a free-wheeling mode, wherein the clutch is disengaged to implement the free-wheeling mode when a vehicle's driving speed is less than a maximum free-wheeling speed.

Claim 22 (previously presented): A method for controlling a clutch located between a drive motor and an automated manual transmission of a drive train, the method comprising:

controlling the clutch so as to change from an engine braking mode to a free-wheeling mode, wherein the clutch is disengaged to implement the free-wheeling mode when no downhill driving is detected.